

Amendments to the Specification

Please replace paragraph 0013 with the following amended paragraph:

[0013] It should be appreciated at the outset that while the present invention relates to an “Microscope and Focusing Device for a Microscope”, the Assignees of the present Application for Patent have developed certain other improvements to microscopes described in United States Patent Application entitled “Ergonomically Arranged Object Adjustment Controls”, U.S. Patent Application No. 10/811,344 which application is filed concurrently herewith by the Assignees of the present Application for Patent, which Application is incorporated herewith by reference in their entirety.

Please replace paragraph 0016 with the following amended paragraph:

[0016] Fig. 2 provides a perspective view of microscope **1**, wherein several elements are not shown in order to obtain a better view of microscope stand **2**. Microscope stand **2** has a flange **11** for mounting a tube (not shown). In addition, microscope stand **2** includes mounting element **12** for microscope stage **6** (see Fig. 1). Mounting element **12** is moved by focusing device **20** parallel to optical axis **5** of objective **4** which is placed in the operating position. Inside microscope stand **2** focusing device **20** is mounted, wherein focusing device **20** has first end **14a** and second end **14b** (see Fig. 3). First and second ends **14a** and **14b** extend through opening **15**, which is formed in first and second side walls **2a** and **2b** of microscope stand **2**. As already mentioned in the description of Fig. 1 operating ~~element~~ elements **8** ~~is~~ are mounted at first end **14a** and at second end **14b**. In the embodiment as shown in Fig. 2 opening **15** has the shape of a curved oblong hole, which is formed in opposing side walls **2a** and **2b** of the microscope stand **2**. It should be obvious to a person having ordinary skill in the art that opening **15** may as well be in the shape of a straight hole.

Please replace paragraph 0018-0019 with the following amended paragraphs:

[0018] Fig. 3 shows a 3-dimensional view of focusing device **20** which is mounted inside of microscope stand **2**. Focusing device **20** defines pivot axis **23**, around which focusing device **20** can be pivoted. Focusing device **20** comprises two elongated bore holes **25** through which a pin of an axis (not shown in Fig. 3) is guided, with which focusing device **20** is mounted pivotable inside microscope stand **2**. Accordingly, pivot axis **23** of focusing device **20** runs in the center of two bore holes **25** which is shown in Fig. 3 with a dashed line. These bore holes **25** hold a second axle **21** (shown in Fig. 4A). Focusing device **20** has an additional first axle **26** which is arranged coaxial to pivot axis **23**. First axle **26** rotates around axis **27** and first axle **26** defines first and second ends **14a** and **14b**, to each of which operating element **8** of focusing device **20** is mounted. The rotating movement between first axle **26**, focusing device **20** and second axle **21** is transmitted without any slip. Accordingly, gear wheel arrangement **22** is fixed on second axle **21**. A plurality of gear teeth are formed at an area in the middle of first axle **26** and constitute first gear wheel **21a**. Gear wheel arrangement **22** comprises first gear wheel **28a** with a large diameter and second gear wheel **28b** with a small diameter. First gear wheel **28a** has a larger diameter than second gear wheel **28b**. Gear wheel arrangement **22** is mounted on second axle **21** of focusing device **20**. Second gear wheel **28b** transfers its rotational movement to gear rack **42** (see Fig. 4a) which moves microscope stage **6** in the direction of optical axis **5**. The rotating movement of second axle **21** is transferred to gear rack **42** (see Fig. 4a), which moves microscope stage **3 6** in the direction of optical axis **5** of objective **4** in the working position. Therefore, gear wheel arrangement **22** is mounted permanently on second axle **21**. Second gear wheel **28b** of gear wheel arrangement **22** is in engagement with gear rack **42**.

[0019] Fig. 4a shows a perspective view of focusing device **20** in cooperation with gear rack **42** for moving microscope stage **6** and adjustable stop mechanism **44**. Operating element **8**, which has a coarse focus and a fine focus (not shown), and microscope stand **2** are, due to simplicity, not shown here. First axle **26** extends across the inside **2c** of microscope stand **2**. Second axle **21** carries gear wheel arrangement **22** and rocker **47** which cooperates in certain positions with adjustable stop mechanism **44**. Adjustable stop mechanism **44** comprises rod **46**, spring **48** for biasing rod **46** and screw **50** for fixing a position of rod **46**. As shown in Fig. 2

screw 50 is accessible from side wall 2a or 2b of microscope stand 2. Rod 46 has first end 46a and second end 46b. First end 46a carries spring 48 and second end 46b includes surface 52 against which one part of rocker 47 abuts and consequently limits any further rotation of operating elements 8. This means that a movement of microscope stage 6 in the direction to objective 4 is limited and this avoids any damage of the microscope slide or objective 4. Rod 46 is flattened at first end 46a and therefore shows flattened area 54 which enables a better and secure fixation by screw 50.

Please replace paragraph 0022-0023 with the following amended paragraphs:

[0022] Fig. 5 shows a front view of focusing device 20 in cooperation with gear rack 42 for moving the microscope stage and adjustable stop mechanism 44. First axle 26 defines first and second end 14a and 14b, to each of which operating element 8 of focusing device 20 is mounted. First axle 26 is arranged parallel to second axle 21. Second axle 21 carries gear wheel arrangement 22, which comprises first gear wheel 28a and second gear wheel 28b. First gear wheel 28a includes pin 60 mounted close to its periphery. Pin 60 cooperates with rocker 47, which is arranged as well pivotable on second axle 21. As already mentioned in the description for Fig. 5 4a rocker 47 abuts against surface 52 of rod 46. This is caused by a certain position of first gear wheel 28a of gear wheel arrangement 22.

[0023] Fig. 6 shows the arrangement of the focusing device 20 is on the interior 2c of the microscope stand 2. The focusing device 20 extends between the two opposing side walls 2a and 2b of the microscope stand 2. The interior 2c of the microscope stand 2 has a dividing wall element 62 in which the rod 46 and the spring 48 are guided. The dividing wall element 62 provides as well a guide for the screw 50 (see Fig. 6) which fixes the position of the rod 46 and consequently the fixing of a position of the rod 46, which in turn fixes the surface 52 against which one part of the rocker 47 abuts.